# Plans for Improving DOE's Lessons Learned Process

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**DOE/EH-3**

## Lessons Learned

• **Can prevent the recurrence of mistakes and deficiencies, and promote good practices - *if effectively identified, shared and used.***

• **> 30 DOE directives address lessons learned, including:**

**Functions, Responsibility & Authorities Manual**
**DOE Acquisitions Regulations (DEAR)**
**DOE-STD-7501-99**

• **Part of ISM's "Feedback and Continuous Improvement"**

**Many Lessons Learned Data Streams**

- **ORPS - DOE operating experience**

- **Site and PSO lessons learned data**

- **Non-DOE operating experience**

- **Accident investigations**

- **EH-2 evaluations, special studies**

- **CAIRS, NTS, REMS**

- **Technological advances & research**

## Many Lessons Learned Programs

- **Site programs**

- **PSO programs**

- **List server (LANL & ORNL)**

- **LL database (EH)**

- **EH data systems**

**Current DOE Lessons Learned Efforts**

- **Chiefly driven by single operating events**

- **Much raw data but little roll-up & analysis**

- **Limited use**

- **Programs & data not fully integrated**

**Goals for Improving Lessons Learned**

- **Reach management & multi-level audiences**
- **Improve LL models, methodologies & tools**
- **Analyze, trend & prioritize**
- **Integrate efforts and share information**

## Roles in Improving Lessons Learned

- **Line management  to provide analyzed data and share results in context of types of operations**

- **EH to provide methods, infrastructure & policy for better analyzing lessons learned**

- **EFCOG to improve the reporting and use of operating experience LL by DOE contractors**

## DOE/EFCOG Lessons Learned MOU

- **Issued November 2000**

- **Establishes cooperative DOE/EFCOG effort**

- **DOE will:**
  - **establish an integrated LL program, in coordination with line management & EFCOG**

  - **develop analytic methodologies and tools**

  - **provide complex-wide analyses of LL data**

  - **examine & improve LL policy**

## DOE/EFCOG Lessons Learned MOU (cont.)

- **EFCOG will:**
  - investigate highly significant events using LL Subgroup
  - include lessons learned in bimonthly Chairman's letter
  - roll-up lessons learned in semiannual report
  - create an effective lessons learned implementation model
  - use INPO information
  - promote prompt analysis and reporting of lessons learned
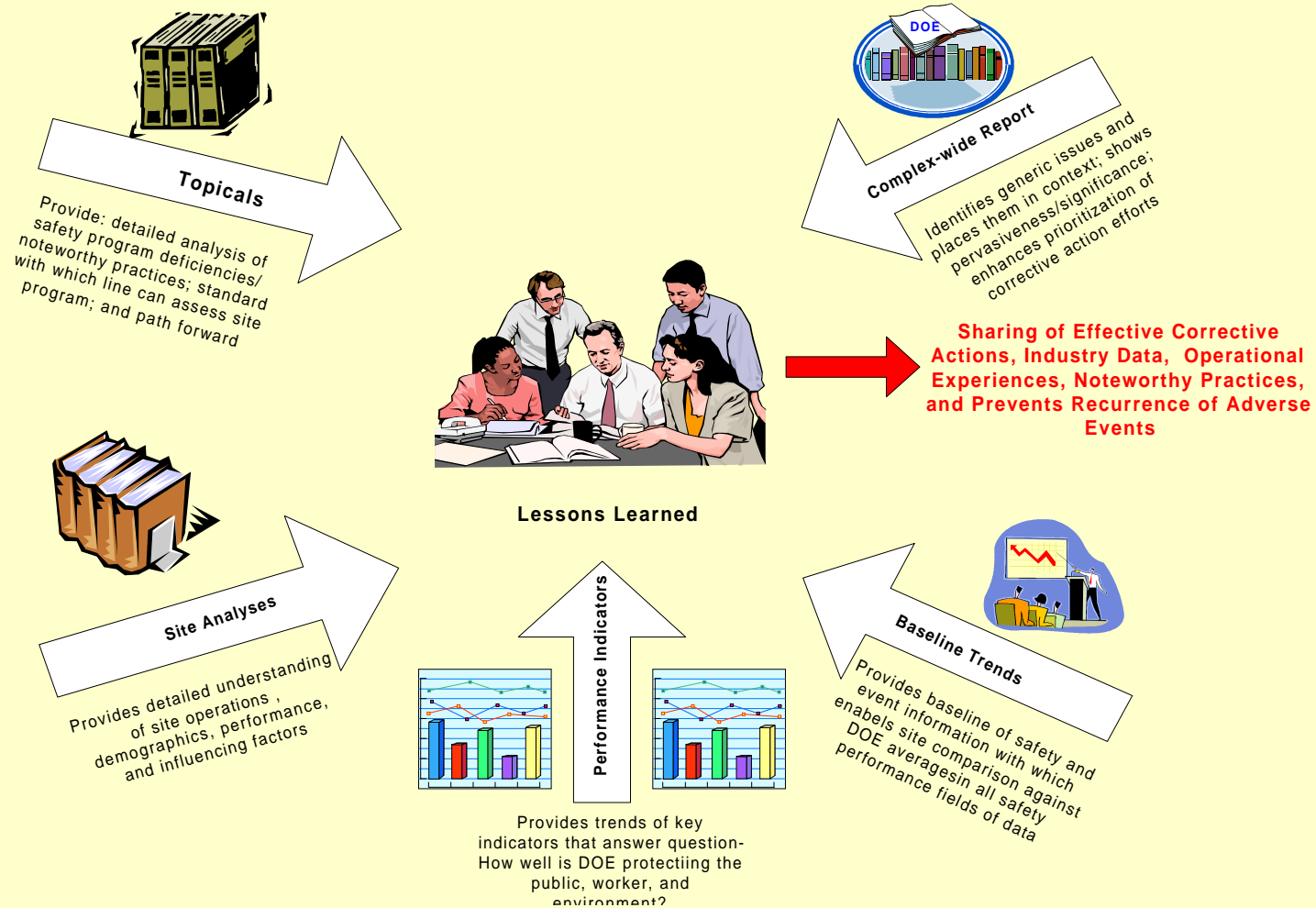
**Office of Performance Assessment & Analysis (EH-3)**

- **Since July 2000, DOE/EH's focal point for the collection, analysis, and dissemination of safety information**

- **Infrastructure for pulling and pushing data & information that can be used by non-experts**

- **Many products related to lessons learned:**
    - **ORPS**
    - **performance indicators**
    - **generic issues**

## PRODUCTS SUPPORTING LESSONS LEARNED

**Topicals**
Provide: detailed analysis of safety program deficiencies/ noteworthy practices; standard with which line can assess site program; and path forward

**Complex-wide Report**
Identifies generic issues and places them in context; shows pervasiveness/significance; enhances prioritization of corrective action efforts

**Lessons Learned**

**Sharing of Effective Corrective Actions, Industry Data, Operational Experiences, Noteworthy Practices, and Prevents Recurrence of Adverse Events**

**Site Analyses**
Provides detailed understanding of site operations, demographics, performance, and influencing factors

**Performance Indicators**
Provides trends of key indicators that answer question- How well is DOE protectiing the public, worker, and environment?

**Baseline Trends**
Provides baseline of safety and event information with which enabels site comparison against DOE averagesin all safety performance fields of data

**Near-Term Activities**

- **EFCOG LL subgroup to develop plans**

- **EH-3 & PSOs to coordinate efforts**

- **EH-3 to test methods to access, screen and filter data from web-based LL systems**

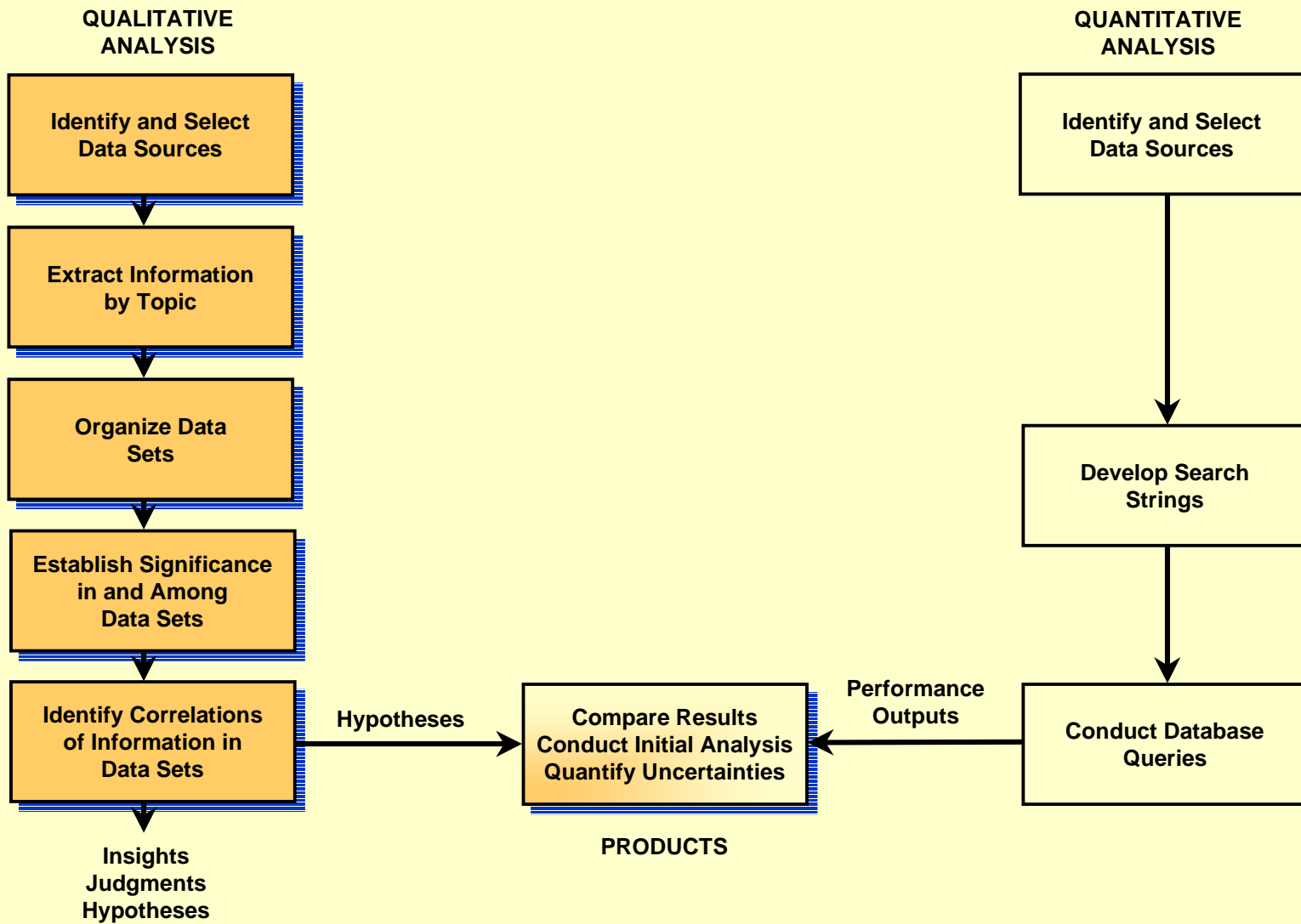- **EH-3 & EFCOG to review LL programs in other industries**

# Backup Slides

# PA&A

# ANALYSIS PROCESS

## QUALITATIVE ANALYSIS

**Identify and Select Data Sources**

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**Extract Information by Topic**

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**Organize Data Sets**

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**Establish Significance in and Among Data Sets**

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**Identify Correlations of Information in Data Sets**

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Insights
Judgments
Hypotheses

→ Hypotheses →

**Compare Results
Conduct Initial Analysis
Quantify Uncertainties**

PRODUCTS

← Performance Outputs ←

## QUANTITATIVE ANALYSIS

**Identify and Select Data Sources**

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**Develop Search Strings**

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**Conduct Database Queries**